

# An Introduction to Morse Message Formats and Handling Procedures

By Ken Miller, K6CTW

The following is a step by step procedure used to call another station and then send that station a message in a telegraph format.

The station receiving is **FB** and the sending station is **RI**. **FB** and **RI** are the *callsigns* of these stations respectively. It is also important to note here that an operators *SINE* is his telegraphic signature. The receiving station here is assumed to have a *SINE* of **D** and the *SINE* of the sending station is **KM**. As you follow this text and the accompanying commentary, you will see that the procedure is quite straightforward, and easy to learn. This example should help to explain how a message is prepared by an originating station and then sent on a morse wire. For those of you who have had experience with sending and receiving formal message traffic on the radio, these procedures will be quite similar.

First establish a wire connection using dial up morse, or whatever other means is available, and then the operator at station **RI**, will call station **FB** as follows.

**FB RI**

and then the sending operator will close the shorting switch on his key so that he can listen to his sounder for a response. Note that the operator sent the call of the station he would like to communicate with followed by the *callsign* of the station making the call. After hearing the receiving operator then answers the call by sending

**I FB**

and then the receiving operator will switch back to receive mode by closing the keys shorting switch. The response is the character **I** followed by the *callsign* of the station making the answer. After the receiving operator closes the switch on the key, this shows the sending operator that the receiving station is once again listening and that the sending operator should now continue. The sending station would then send the following

## HR 1

The **HR** means hand ready and is sent to advise the receiving operator that something is coming that will need to be copied and this is then followed by the number of messages that will be sent by the sending station, this is **RI** in this example. Then the sending station would pause for a few seconds to give the receiving operator time to roll a message blank into his mill. Mill is telegraphers jargon for a typewriter. In the absence of this, the receiving operator would just get a new message blank and a pencil. The sending operator would then begin sending the preamble of the message. Continuing with the example will result in the following block of data being sent.

NR 46 **RI KM** CK 5 DL PAID RICHMOND BC 0842 FEB 3.

The first group, or block of characters, is the abbreviation signifying that the message number or NR is next. This prosign is not copied down by the receiving operator but is used to signify the start of a message. Then the actual number of the message is sent. The next group is the **callsign** of the office where the message originated. Following this is the **signe** of sending operator. Immediately following this is the prosign CK which identifies the next number sent as the check. The next group sent is the check number. The check is the number of words in the text portion of the message. It is interesting to note that punctuation is considered to be a word. Remember that when these were sent for real money, every word was charged for so any useless punctuation or unnecessary words were usually left out. The next group identifies the type of this message. Each of these message types had different billing values, or costs per word of text. Examples of these codes are, **DL** for Day Letter, **NM** for Night Message, **NL** for Night Letter, **LCO** for Deferred Cable, **NLT** for Cable Night Letter, **WLT** for Weekend Letter, **DPR** for Day Press Rate, etc.

The next group identifies how this particular message is paid for. That is to say that it was either paid at the originating station, or that the receiving station should collect payment when delivering the message. These would be sent as **PAID** and **COLLECT** respectively. However, since these messages are no longer sent for profit as a business, and are only sent as a public service, this can be dispensed with in current practice. The place of origin, which

includes the city and state or province is the next group sent. Also, there is no comma between the city and state or province. The last groups in the preamble are the filing time values which may include the optional local standard time in 24 hour, military time format, then the required month and day. The period is sent to signify the end of the message preamble and to separate it from the next block in the message which is the address. The first group sent in the address section is the word **TO**. This also is procedural and is NOT written down by the receiving operator. It just further delineates the name and address for which this message is destined.

**TO JOHN DOE ,  
105 ANYOLD ROAD ,  
FAIRBANKS ALASKA 99999 ,  
907 555 1234 .**

It should be noted that the commas in the address section are used to separate the elements of the address block. In addition, a period is once again sent at the end of the address block to further separate it from the text of the message. An interesting note here is that the comma (.-.- in American Morse) used here to separate address items is still in use amateur radiogram formats put out by the ARRL as the prosign **AA** used to separate item in the address block. With all the address and billing and record keeping now sent, it is finally time to send the text of the message. Our message here is only five words, but it does provide an adequate example. The sending operator would then transmit

**YOUR MESSAGE RECEIVED THANKS 73 .**

Here, as in the previous sections a period is once again used to identify the end of a section of the message. In this case it is the text block. The final section of the message is the signature block. This block, like the address and preamble has a special prosign which starts it off. As with the other sections, the operator does not copy down the **SIG** group, it is there to better identify that the signature section is to follow.

**SIG BOB SMITH .**

A period is once again used to identify the end of a section of the message. In this case it is the signature

block and therefore the end of the message. In our example, there was only the one message to send and thus the sending operator needs to tell that to the receiving operator. The prosign to use for that is the group **NM**. If there had been more messages to send, then the sending operator would send the number of messages remaining. Continuing this example, the sending operator now sends

**NM**

Now to turn the wire back to the receiving operator, the sending operator would send the callsign of the receiving station, **FB** in this case, followed by the callsign of the sending station, here **RI**, and then close the shorting switch so that the receiving operator can transmit to request any missed or confused words or numbers, or to signify that all was received correctly. Thus our sending operator would key

**FB RI**

If the receiving operator had copied all of it perfectly, then he would send back an OK followed by his **SINE**. When the sending operator receives this, he can then mark on his message blank, the one that contained the original message, that the message was received by writing the current standard time and the date and the **SINE** of the receiving operator at station **FB**. This is referred to as servicing the message. Now that the message has been sent and serviced. It would be sound like this

**OK D**

Once the receiving operator sends this last piece of information and confirmation of receipt, he would then close the shorting switch on his key. Now that BOTH operators have their switches closed. This returns the wire to anyone for use. Although there is a lot more to actually getting a message through and verified, this simplified version of a perfect session should illustrate most of the important features, as well as the simplicity of this form of record or business messaging.

Now here is a copy of the message as it would appear on the "mill" at station **FB**

46 RI KM CK 5 DL PAID RICHMOND BC 0842 FEB 3

JOHN DOE  
105 ANYOLD ROAD  
FAIRBANKS ALASKA 99999  
907 555 1234

YOUR MESSAGE RECEIVED THANKS 73

BOB SMITH

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